IBM Language Strategy
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COMPUTERWORLD
The Newsweekly for the Computer Community

Job Security — Yours!
See Page 7

Vol. I No. III CAMBRIDGE, MASSACHUSETTS AUGUST 30, 1967 25 cents

Good PL/1 Performance

The performance of the new PL/1 release due at the end of the month but already extensively tested by privileged users is considered up to standard by IBM. (See figures of the comparative performance of this release in Computerworld, July 26, p.3). Future releases will emphasize providing language features rather than increasing the performance.

A problem in estimating the actual performance of the PL/1 compilers was reported at the SHARE meeting. The reported results of some of the tests were found to vary with the program size – with small programs found to be very inefficient, and large programs found to be efficient in comparison to other compilers.

Another problem which is apparently being solved at last concerns the manuals for the PL/1. The present SRL manual has been described as being "very, very bad" with many areas which can scare a student to death. A new version is due in September, and this is expected to be very much better. It has already been reviewed and commented upon by members of the users groups concerned, and the final form takes into account these comments.

Jantzen Offers 1410/7010 Emulator

A rewritten version of IBM's 1410/7010 emulator program is saving Jantzen Clothing, Inc., Portland, Oregon, time and money. Jantzen's Director of Data Processing, Gordon Richardson, stated that "The Emulator provides complete program compatibility between a 1410 or 7010 1301 system and a properly equipped model 40 with 2311 or 2314 drives." Any valid use of the 1301 file can be emulated on the model 40.

The Jantzen version offers faster seeks, 1/3 faster rotational delay, on a 131K system the ability to emulate 80K programs. It's minimum equipment requirements are also $3000 per month cheaper than IBM's 2302 approach.

However, Jantzen's program allows only 11 physical (not logical) maximum sized 1301 records on a 1316 track in move mode. In comparison, IBM's version allows 24 records, using the 2302.

Stat-Tab Enters Education Field

Statistical Tabulation Corporation of Chicago has entered the education field. This new Education Division will offer data processing and computer education to business and the general public on a fee basis.

Mr. John J. Jensen has been named National Director of this new [illegible]n. Their first "Computer and B[illegible]ness Skills Institute" will o[illegible]n i[illegible]hicago, Illinois, at 2 North [illegible]e Plaza, on September 8, [illegible]Other such schools will be operated nationally.

New 360 Incompatibilities Found,— TOS, DOS, OS, Mutually Incompatible!

THIS REALLY IS NOTHING!...but wouldn't it be nice if automation poured out our coffee for us, as in this picture of the UNIDATE Industrial Robot.

Experience of users of the three major System/360 Operating Systems has shown that there exist many incompatibilities which can effectively prevent users from obtaining some anticipated operations. Typical of the incompatibilities which have arisen is the problem of using disk packs written by one operating system under another one. A user of the full operating system who - perhaps on a smaller system - uses the disk operating system finds that the recording methods are apparently incompatible and that the first track of the disk may well get clobbered if he tries to read it with another operating system! The interchangeability of programs, as well as of tapes and disks, has been a major selling point since April 1964 when IBM introduced the 360 as being a family of "Upward and Downward Compatibility". As many installations plan to use more than one operating system either immediately or in the possible future, the problem may be a very serious one - - in some cases throwing the overall system into confusion.

IBM CAUGHT UNAWARE

This problem appears to have caught IBM unaware of its full impact. An IBM spokesman in the SHARE conference officially stated that it is known that these incompatibilities exist between the various operating systems (and between the various compilers even within a specific operating system) but that the company is not presently able to provide users with a list of them so that they could plan ahead to meet the situation. Work is apparently proceeding to create such a list but the date of publication is at present unknown.

TOS TO DOS

The situation has come as a particularly unexpected surprise to users of the old Basic Operating System who elected to go to the Tape Operating System when the BOS split into two parts a year ago. No indication was given at that time that it was more than a change of name. Many of the manuals continued to be the same for both systems, particularly the language manuals. Large numbers of users of the Tape Operating System were advised by their IBM representatives that movement into the Disk Operating System was simply a matter of obtaining the necessary hardware. To what extent this is true will remain uncertain until IBM provides the lists of actual incompatibilities which do exist.

BROOKS' FEARS JUSTIFIED?

The situation comes just a few weeks after Congressman Jack Brooks (D., Texas) selected "Compatibility" as one of the two major difficulties facing the Federal Government in the computer area. Congressman Brooks is well known for his sponsorship of the Brooks Bill which has saved the Government over $300 million in documented savings during the first twenty months of its operation. He summarized his impressions last month after holding a three-day review of the current situation in the computer field and pointed out just where a user needed to pay attention. He singled out just two topics: "Standardization" and "Compatibility".

GE Mystery Cleared Up

The actual location of the GE Time-Sharing system which was delivered prior to the announcement of the system by GE is at the Fulton National Bank in Atlanta. The site had not been better described by GE than "1,000 miles from Boston" and so an air of mystery had been built up.

The bank computer team has taken a leading role in designing the hardware configuration, and has drawn heavily on experience both from the Dartmouth time-sharing systems and from GE communication work.

At present, while the hardware and basic software is operational, the application programs are still being developed and tested, so that the bank is not ready for a full publicity campaign.

Save Money While Polling

A one-second poll of trunk lines coming into a computer system often costs unnecessary vendor money because of the minimum one-second charge. Even though there are no live lines and polling is completed in a millisecond or so rental will continue for the remaining 999 milliseconds. Then when another round of polling starts one second after the first round, again the system will stay live and on rental for another second. Although it will be working only 1 percent of the time!

Some users have found a way out of this by reducing polling frequency from one second to five seconds. This does involve a small degradation in service but one which can often be afforded in activity periods. But it involves a saving of 80%, otherwise, in the excess rentals charged.

WELCOME ACM!
Come and see our booth
Computerworld

H'well To Use T-S System

A time-shared system linking engineers from Seattle to Boston with a computer complex in Minneapolis will be installed by Honeywell Inc. next year for its own corporate use.

The system is designed to provide a problem-solving computer for Honeywell engineers throughout the U. S. through teletype units at their plant sites.

Two DDP-516 computers and a DDP-416 computer from the firm's Computer Control Division in Framingham, Mass. will make up the Minneapolis-based system which will handle up to 48 users simultaneously on a cyclical time-sharing basis. Initially, 40 terminals are slated for installation at plants throughout the country including the firm's Ordnance facility in southern California, Test Instruments division plant in San Diego, Development laboratory in Seattle, and computer plants at Framingham and Waltham, Mass.

Engineers will be able to enter their own problems directly in any of three computer languages -- Fortran IV, an interpretive algebraic language, or a special scientific language.

Software for the special system is being developed jointly by the Computer Control and Aerospace divisions and the Corporate Research Center.

Looking For A Job?

Average weekly salaries for the same job vary up to 16% for EDP Personnel – depending on the area of the country. Distinctions between best total average salary ratings and relatively best paying areas are quite pronounced, and rather surprising. An area which pays its DP manager unusually well may pay its systems people considerably less by comparison with the national scene.

These are some of the conclusions in a just-completed research study on computer salaries by COMPUTERWORLD. The full story ... including advice for the job seeker on good and bad areas ... starts in next week's COMPUTERWORLD.

Welcome PL/1

PL/1 has now become a working practical language and joins with COBOL and FORTRAN as a usable general purpose language. COMPUTERWORLD is glad to see it added to the programmer's armory. Few programmers are completely happy with today's general purpose languages – and all additional languages which become easily available are most welcome.

They help programmers.

The Problem In Measurements

Dr. Fubini put his hand on one side of a major problem when he said that "We do not yet know what to measure" in his discussion of programmer efficiency.

The other, and equally important side, is that the measures which we ARE offered are not backed up by sufficient detail - so that we know what they mean.

At least three times this year we have found that comparative improvement figures offered by major computer manufacturers were really decided by the special circumstances of the tests - and not by the actual improvements.

COMPUTERWORLD would like to see Dr. Fubini and his corporation pay much more attention to this side of the problem. It is just as important to today's user - and could be solved quite simply by always publishing the details of the programs and the data used.

How about it, Dr. Fubini?

IBM Is Just Another Vendor

"IBM IS JUST ANOTHER VENDOR – and too few people realize how hard it is to keep them in that position." This was the reason one of the SHARE officers gave when COMPUTERWORLD asked him why people should attend users groups meetings. In short, it was a statement that SHARE was to him a pressure group. Not necessarily a strong one, but the best one available. And it was a statement that users need pressure groups when dealing with IBM.

During the course of the meeting it became very clear that this was in fact true. To get a computer system into successful operation means coordination between many, many people and systems – each relying upon performance - as - specified by the other parts. However, performance is frequently not as specified by IBM information sources. Software does not appear on time, is not as described in the manuals, and the actual meaning of words in the manuals is not clear. IBM disclaims more than moral responsibility here – refusing to regard the software systems and specifications they publish as any part of a contract. Despite this they sell computers.

Actually in such a situation, it is highly unlikely that they will voluntarily change their position and until they do the data processing manager is forced to gamble his professional life on his estimate as to just what will actually come out – and when.

It's a big gamble.

No wonder many people find it worthwhile trying to beef up the pressure groups. COMPUTERWORLD recommends that with the present situation, data processing managers see that adequate budgetary provision for user groups support be made priority item in their budgets.

(Put it down to "vendor control" if your accountant doesn't like seeing travel dollars going for education!)

After all IBM is just a vendor, and user groups are the best form of control presently known.

To the Editor:

Those of us in the Anchorage area who received the first edition of Computerworld were quite favorably impressed with your publication and discussed it at our DPMA executive board meeting. The board recommended that I write you requesting thirty-five sample copies of the paper that we could distribute at the DPMA meeting on September 6th.

Many military and civil service computer personnel attend these meetings. Though they are not DPMA members, and therefore were probably not included in your initial mailing, they would be interested in seeing Computerworld.

Ann M. Troche, CDP
Vice- President, Publicity
Anchorage DPMA

EDITOR'S NOTE: That's a nice idea! Any other chapters looking for a meeting subject? We'll be happy to supply a reasonable number of copies.

To the Editor:

On July 12, 1967 I subscribed to your newspaper. I received Vol. 1, No. 2 of your paper, but to date I have received no further issues. Please check my subscription and inform me of any problem.

Robert A. Hoadley
Data Processing Supervisor
City of Raleigh, North Carolina

EDITOR'S NOTE: Sorry, we did not make it clear enough that Computerworld is weekly as from Number 3 – *that is THIS issue. You have not missed any – and your subscription is for the full 52 copies.*

To the Editor:

On Page 6 of Computerworld's edition of June 21, 1967 a program called Pegasus was mentioned.

This program was offered by Management Computer Services Corporation. I would like to know if you could send me the address of this corporation as I would like to get some information about this program from them.

Any effort on your part to help me would be greatly appreciated.

Donald E. Elsass
North American Aviation
Columbus, Ohio

To the Editor:

The June 21 edition of Computerworld contained an article on Pegasus, a 1401 S.P.S. to 360 B.A.L. program translator developed by the Management Computer Service Corp. (M.C.S.C.).

We are interested and would like to obtain information directly from M.C.S.C. in respect to this translator. Your article failed to include a mailing address. Please advise.

R. H. Shew, Manager
Methods Division
Parke, Davis & Company, Detroit

EDITOR'S NOTE: M.C.S.C.'s address is P.O. Box 2332, 740 Main Street, West Hartford, Conn. 06117.

In general, Computerworld's policy is to include the postal town address of any referenced firm, so that a call to telephone information can locate the firm concerned.

IBM Language Strategy Announced By Humphrey

W. S. Humphrey Jr. IBM vp, speaking to the SHARE meeting in Miami on August 17, announced IBM's language strategy so far as general purpose procedural languages were concerned. The occasion coincided with the publication of the performance characteristics of the up-coming Version 3 of the IBM PL/1 F compiler - the first IBM PL/1 to come up to practical performance standards. It also coincided with the tenth anniversary of the FORTRAN language which, originally an IBM proprietary system, was placed in the public domain by IBM in the early sixties, and has since been the standard mathematical language for computers.

He made five major points:-

1. Extensions into new application areas will be based on PL/1, since IBM considers it to be the best vehicle.

2. IBM will continue to support Fortran and COBOL at their present language levels, except where recognized industry standards dictate extensions.

3. IBM will continue assembler and RPG development.

4. An F level Algol has been released under OS/360, but no further Type 1 Algol products are planned.

5. IBM will expand the array of PL/1 processors to provide broad coverage for the language.

The speech was clearly a major policy statement by IBM, and predictable reactions could be found to its contents. In particular many read it as being the beginning of the end fo. Fortran and COBOL. They pointed out that the promise to continue developing the language where " recognized industry standards dictate extentions" might well be just a formality as no recognized industry standard could be created in the absence of IBM's active participation.

A Book For The Professional

DIGITAL COMPUTER USER'S HANDBOOK – *Edited by M. Klerer & G.A. Korn; McGraw-Hill; 922 pp. with index. $27.50*

This book consists of four parts, each dealing with different topics. The editors have secured 20- to 60-page write-ups on some 31 important topics from contributors who know how to write, as well as simply knowing their subject. These have been presented clearly so that an interested computer user – even without any practical knowledge of the subject before using the book – can bring his present expertise to bear and emerge with a workable understanding of the subject, and in some cases even with programs ready to run!

Professor Tucker's presentation on Statistical Techniques & Computations can serve as an example of the style.

Only 30 pages, it covers the statistical analyses of one, two or multiple samples, regression analysis and transformations of variables. Fortran programs or central DO loops are quoted, as well as traditional equations; and the purpose of the operations are well explained.

The editors state that the handbook is oriented towards the user who has been professionally trained in a field other than programming – and particularly toward the intermittent user submitting a problem for solution.

Anyone who has tried to run an installation will be all too well aware of just how many such people there are – and of the havoc they can cause to schedules with their "little jobs". The Digital Computer User's Handbook – available on loan to them from the installation library – may well help them considerably in their dealings with the computer. However, it also forms a useful bridge for the computer professional who is himself – unavoidably – just an intermittent user of many of the currently applicable methods of numerical analysis, statistical analysis and leading computer applications. As such, it belongs on the computer professional's bookshelf, despite its cost.

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MITRE Software Report

A method for the evaluation of software, Vols I & II A.E. BUDD. AD 639 586, AD 651 142 $3.00 each Dept. of Commerce Clearinghouse Springfield Va. 22151

This is a report prepared by the MITRE organization for the Air Force containing recommendations on the evaluation of software.

There are no short cuts in this field, and these volumes do not attempt to minimize the problem, rather they present in considerable detail all the possible factors that can be considered.

The first volume describes the general methodology and points out that each evaluator must independently decide which points are most important to his own case. To help in this, fourteen major measures of software capability are defined in Volume I, and there is a short discussion of benchmark problems.

In the second volume some 100 features of compilers are defined and their relationships to the fourteen measures are shown in tables. Some 100 supplemental questions are also provided which can be directed to a supplier. In the third volume some 200 features of operating systems are defined and related to the fourteen measures in tables. There are some 100 supplemental questions. The largest part of these volumes is devoted to these basic definitions of measures and features. This is well done and is a rewarding tutorial for the novice and helpful aid to clear thinking for the specialist.

It is obvious that there is still a difficult job for the evaluator to decide which parts to use. At a minimum he can select what he thinks are the most relevant questions from the supplemental list or use them to develop some of own. There will be few evaluators who would want to exploit the full potential covered in this report. Overall, for all levels of evaluation, it provides a comprehensive, well defined check-list of important software criteria.

C-E-I-R And CDC Reopen Merger Talks

MINNEAPOLIS, August 15 -- Talks which were stalled two years ago between C-E-I-R and Control Data at the Minneapolis-based computer manufacturer have been resumed and agreement, in principal has been reached between the two companies. Subject to the approval of the boards of directors and stockholders, the agreement would involve the exchange of one share of Control Data common stock for each six shares of C-E-I-R. The resulting firm would be an unusually powerful amalgamation of a major computer manufacturer who already has large-scale interests in the training industry, and one of the most sophisticated applied research and computer services corporation presently in business.

C-E-I-R centers, which are equipped with more than forty million dollars worth of computers, are located throughout the United States and in Mexico and Holland. In general they have normally had IBM equipment and provide a broad range of "problem solving" services for business, science and government.

Recently C-E-I-R expressed dissatisfaction with the performance of their Model 360/65 machine, but are continuing to install more IBM equipment. They have, for instance, just installed a new IBM system 360/44 computer system in their San Francisco center, one of the first 360/44s to be installed in the Bay area.

Burroughs Introduces New Computer Systems

Burroughs Corporation has announced improved models of the B6500 and a brand new B7500. A spokesman told COMPUTERWORLD that a third of the orders in-house were coming from people who do not presently have Burroughs equipment. The balance comes from satisfied customers of the Burroughs 5500 series of systems, which was introduced in 1962 and has substantially increased in popularity since the advent of the IBM System/360 put a "seal of approval" on operating systems and multi-programming, and as coincidentally the Burroughs software became more and more efficient for the users.

Delivery of the systems and their associated software is scheduled for early 1969. The systems will be upwardly compatible with the current 5500.

The systems can accommodate more than 2,000 remotely-located communications devices, such as teletypes, input and display or other input or output unites in a time-sharing situation, and simultaneously be processing several other independent programs.

The Burroughs president said the new systems are "very important additions to the company's family, the B6500 and B7500 systems provide a bridge between the intermediate sized B5500 and the very large scale B8500. Other members of the family are the smaller B2500 and B3500 third generation systems.

"The new systems provide ascending choices of processing speed and power, and options of either magnetic core memory or ultra-fast thin film memory," he said. Thin film main computer memory, developed and manufactured by Burroughs, can access 48 bits of data in 300 billionths of a second. Very fast magnetic core memory can access 48 bits of data in 600 billionths of a second.

B6503	cycle time 1.2 usec	core memory	$25,000 rental
B6504	cycle time 1.2 usec	core memory	$33,000 rental
B6506	cycle time 0.6 usec	thin film	$38,000 rental
B7504	cycle time 1.2 usec	core memory	$45,000 rental
B7506	cycle time 0.6 usec	thin film	$54,000 to $90,000 rental

EMPLOYMENT OPPORTUNITIES

TIME SHARING SYSTEMS ANALYSTS
Salary .....$15,000-$22,000

An outstanding consulting/service company, the leader in its field nationally, seeks about 8-10 senior analysts. Candidates should have software experience and have worked on compilers or operating systems. Should also have some real time or data communications experience. T.S. experience itself not critical. Will develop software for Time Sharing activity, involving a broad array of scientific, engineering, and commercial applications.

DIRECTOR, COMPUTING SERVICES .....$19,000-$27,000

Direct the development of numerical analysis activities within one of the largest and most modern research laboratories in the world. Also, assume responsibility for initiating research and development work in the area of the applications of computers to manufacturing process control.

Professional and management responsibilities include:
1. Numerical analysis techniques.
2. Statistical programming techniques.
3. Administration of Computer services to users.

This position also calls for the unique management capabilities to work in association with senior member of operating division production and engineering and corporate information systems and procedures staffs.

Adapting computer control.

This position does not involve any direct responsibility for operation of manufacturing computer control facilities.

Seven to ten years work in advanced project management and planning areas. Experience in the use of scientific computer applications and programming techniques is required.

SYSTEMS PROGRAMMERS
Salaries Up To $25,000

Our client requires anywhere from one year up programming experience on medium or large scale business computer systems, in at least one area of software development — executive routines, emulators, simulators, communications, program diagnostics, or sort/merges.

Persons with business applications programming experience, real-time and random access systems including software utilization and program testing and debugging, may also qualify.

DIRECTOR — M.I.S. .....$35,000-$40,000

A very prominent firm operating nationally (headquarters, New York City), an outstanding leader in the communications industry seeks an outstanding professional who can manage not only the entire M.I.S. department but computer systems, design and development, and large communications network as well.

They will only be interested in candidates with demonstrated records of significant accomplishment in these areas.

COMMUNICATIONS ANALYSTS

The same firm as above is also looking for a number of thoroughly experienced communications analysts thoroughly conversant concerning long lines and terminals. They also seek systems programmers experienced on executive routines and operating systems and software programming. Salary levels are $13,000 to about $18,000.

OTHER EMPLOYMENT OPPPORTUNITIES INCLUDE

EDP—Systems Manager	$30,000-$35,000
Business Systems Managers	$20,000-$27,000
Management Information Systems Managers	$18,000-$27,000
M.I.S. Internal Consultants	$18,000-$25,000
Data Center Managers	$18,000-$25,000
Regional Manager-Consulting/ Service Co.	$25,000-$30,000
Systems Analysts/Managers	All Levels

EMPLOYER CLIENTS ASSUME ALL OUR CHARGES. A detailed and comprehensive listing of employment opportunities in the Management Sciences, Data Processing, and Management Information Systems is available upon request.

If you will be in attendance at the ACM Convention we will look forward to meeting you either at our office or at the Sheraton-Park Hotel.

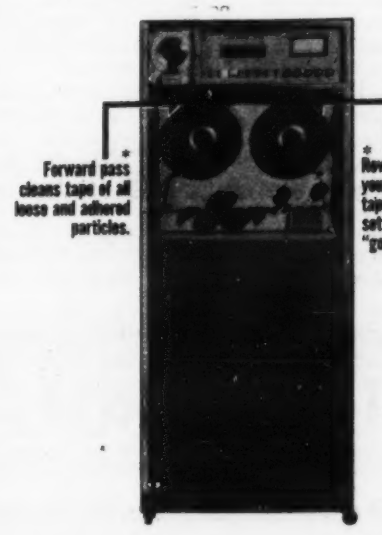
All interested parties are invited to send us a detailed experience resume which should include position objective, current salary, salary requirements. geographic preferences, and areas which will not be considered.

HALBRECHT ASSOCIATES, INC.

7315 Wisconsin Avenue Bethesda, Maryland 20014 (Suburb-Washington, D.C.) Phone (301) 656-9170

See us at booth #170 ACM, Washington, D.C.

THE REAL PRICE OF MAGNETIC TAPE IS ITS FAILURE COSTS ON THE COMPUTER — NOT ITS PURCHASE PRICE.



INTRODUCING THE NEW CT-100

gets your tape as clean as possible — lets you know just how good it is. Here's what this revolutionary new system will do.

*1. The Cybe-Tester can test simultaneously for signal dropouts — adjustable from 20 - 80% threshold.
2. Write skips — preset threshold at 32% — (computer operating level).
3. Skew errors — adjustable for proper density.
*4. 7 channels, 556 bpi or 800 bpi.
5. 9 channels, 800 bpi or 3200 fci.
6. Full-surface (5/4 head) 800 bpi or 3200 fci.

The Cybe-Tester will indicate:

*1. How many signal dropouts.
2. How many write skips.
3. How many skew errors.
*4. Location of each error.
*5. Tape length in feet.

You determine the tape specifications.

1. How many errors are acceptable (error counter).
2. What channel format (7, 9, 5/4).
3. What density (556, 800, 3200).
4. What repairs to make (from chart and counter).
5. You take the proper action (tape OK — tape needs repair — replace tape).

***Basic machine.**

Want more information? Write or call.

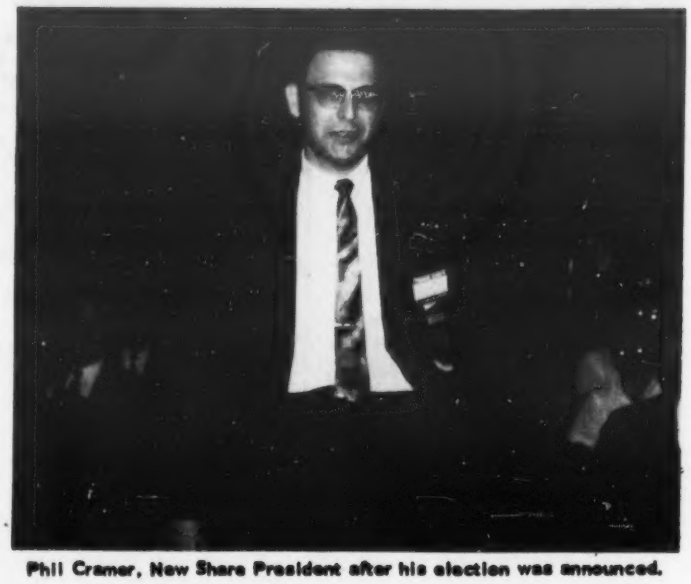
CYBETRONICS INC.
122 Calvary St., Waltham, Mass. (617) 894-6812

Big IBM Users Meet In Miami

SHARE XXIX took place in Miami on August 14 through 16, attracting some 1460 attendees from the users of large IBM systems. Included in the crowd were many members of the other two IBM computer users' groups, GUIDE and COMMON, among them the presidents of these organizations. Also included were some 300 IBMers whose $20 registration fees made a substantial contribution to the SHARE treasury.

The first two days were made up of working committee meetings and "Birds of a Feather" Sessions where informal groups of people gathered to discuss special topics. Anyone could start such a gathering simply by putting a notice on the main notice board. And many people did. Subjects ranged from discussions of IBM metering policies to working sessions on Data Banks. Many were crowded, particularly the ASP and HASP sessions which were concerned with the technique of splitting computation from input-output operations. (These are covered elsewhere in the paper.) About one-third of those attending - some 500 or so - seem to have taken part in these sessions, and many of them considered this to be the really important work.

On Wednesday the open sessions commenced - although the various committees continued meeting to get their work done. The keynote speech by Dr. Fubini, IBM VP, called for a radical change in the techniques of programming. "Programming must become a science", he told his audience - but went on to admit that presently so little was known about the programming process that large-scale research would be needed before we even knew what to measure. Talk afterwards seemed to suggest that most users had other tasks which they regarded as being more immediately necessary.



Phil Cramer, New Share President after his election was announced.

The SHARE annual elections were held on the same day, and all the new officers but the President were selected. The Presidency went into a run-off on Thursday, won by Phil Cramer of SDC over Mike Efroysmon of Esso Math and Systems.

Holding office in SHARE is by no means a light task, as the retiring President, Jim Tupac of the Rand Corp., pointed out in his address to the meeting. The importance of the work - - which effectively produces the major guidelines for IBM's development program - - makes it impractical for anyone to handle it without full cooperation from his own management. "Getting management to realize that this is in their own best interests if they want IBM to supply their needs properly, is one of the most important tasks we have," he said. In particular, the need for volunteers for various administration duties was emphasized by Mike Efroysmon, the retiring secretary, and other speakers. The reality of the time-squeeze was underlined by the comments of the unsuccessful candidates as well as by platform speakers. W. H. McKenzie, defeated for the Vice-Presidency, gave an official quote to COMPUTERWORLD. "I'm relieved," he said. "Now I can get on with the job back at the ranch."

On Thursday the general session took up the issue of the possible merger with GUIDE. While some took the viewpoint that this was inevitable, and quoted the March '67 postal ballot to show that over 80% of SHARE installations approved of the merger, in principle, the meeting voted to take a much more cautious approach, and instructed the new Executive Board to examine all the alternatives as well as the merger itself.

The turning point in the debate probably came when one installation representative said that he simply had not understood the implications of the postal ballot – and did not like them now that they were read back to him.

A major speech by Mr. Humphrey Watts of IBM followed. This is covered in detail on Page 2 in view of its importance.

In the meantime, sessions were going on twelve-deep, and committee chairmen were being impressed with the need for quick, detailed reports, for publication in the Proceedings. Sol Pollack, who continued as Proceedings Editor, was using the successful DATA TEXT system provided by IBM in the Deauville Hotel, utilizing an IBM 1460 system in New York to provide quick turn-around. At the end of the conference he estimated that the proceedings would be published within six weeks - - and gave credit to both the co-operation of the session chairmen and to DATA TEXT for this achievement.

As the session ended, representatives found the outside world had not stood still. A few miles away in North Miami Beach, the area's first computerized restaurant was starting to serve (and account for) its first hot dogs; the Miami Airport Motel started advertising "The Four Bits"; Time Magazine weighed in with an article entitled "The Software Snarl"; the Department of Commerce announced growing Japanese electronic imports into the U.S.A.; and a Tokyo software house advertised in a major American professional magazine for software people of all ranks. The advertisement was in English AND Japanese.

Quite a week.

BULLETIN BOARD

NCR Orders Reach New High

The National Cash Register Company achieved a new high in orders for EDP equipment during the first half of this year. Computer equipment orders for the six month period ending June 30 totalled $95 million, representing a 17% increase over EDP orders in the corresponding perios last year.

Chairman Robert S. Oelman says banks, schools and hospitals have been particularly receptive markets during recent months.

Computing & Software Up

Earnings of Computing and Software, Inc. for the third fiscal quarter ended July 30, 1967 climbed to an all time high of $206,000 or .21 per share.

C-E-I-R 7090/94 Program

C-E-I-R, Inc. is offering a program which designs printed circuit boards used in electronics manufacture and automatically produces the drawings needed for their construction. Called C-E-I-R ACCEL, the program is available through the company's Boston Center, and uses an IBM 7090 ot 7094 computer for initial processing. Graphic cutput is then produced off-line on a Stromberg-Carlson 4020 Cathode Ray Tube Plotter.

Cable & Wire to be Controlled

A management information system to monitor and control the annual production of millions of miles of telephone cable and wire will be developed around two RCA Spectra 70 computers at the Baltimore, Md. plant of Western Electric Company.

SDS 940 Installed at Harvard

An SDS 940 time-sharing computer system has been installed at Harvard University. Access will be by more than 100 Teletypewriter consoles at the University and at nearby Harvard-affiliated hospitals.

Ampex Sales Up 14%;

Record sales and earnings for the first quarter were achieved by Ampex Corporation in the three months ending July 29.

Sales totalled $52,749,000 (up 14 per cent). Net earnings after taxes were $2,072,000 (up 10 per cent).

Backlog of product orders at the end of the quarter was $50,150,000, approximately the level of a year earlier.

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Ninety percent of the people who are using time-sharing are doing it on GE computers. Engineers report their productivity has increased by 50 to 500 percent. They can learn to use it in less than a day, because the GE-420 features BASIC, the simplest of all computer languages.

Even though the GE-420 has this time-sharing capability, it leases for little more than a regular batch-processing system: about $18,000 a month. And it *can* be used for batch processing, when not in time-sharing mode.

To find out how quickly you can be getting the benefits of GE-420 time-sharing, call your GE Information Systems Sales Representative. Or wire General Electric, Room 912, 2721 North Central Avenue, Phoenix, Arizona 85004.

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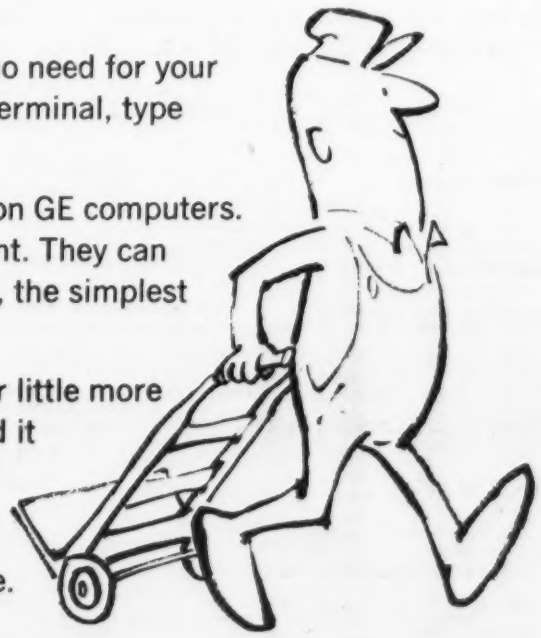

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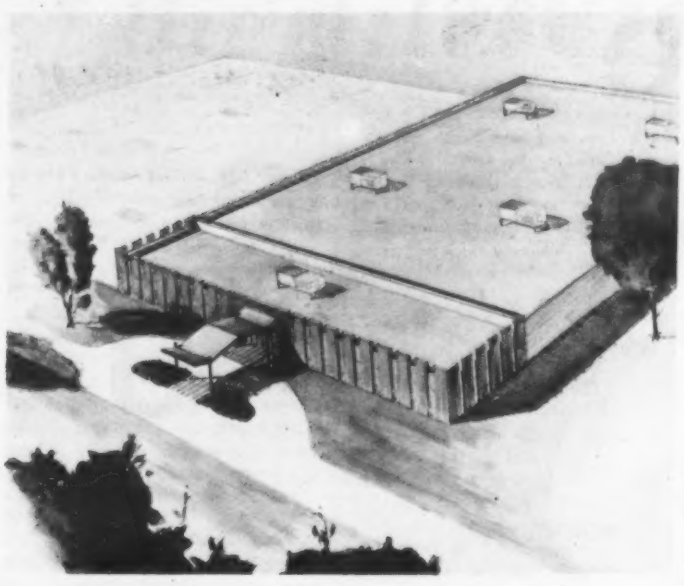

Mohawk Data Sciences new headquarters building at Herkimer, NY will open on Sept 15. Mohawk agreed this week to merge with ANelex Corp, issuing one share of MDS common stock for each three shares of ANelex common.

Mohawk Data-Recorder In Use

Thirty Mohawk 1101 Keyed Data-Recorders are now in use at The Home Insurance Company in New York.

With one of the largest central data processing operations in the insurance field, the firm now processes about 2 million unit records per month. Home's existing data processing system has been modified to accomodate source input on magnetic tape, the recording medium used in Data-Recorders.

Company executives say that Data-Recorders will help them reach their objective of an all-magnetic tape system for greater economy and internal efficiency with the least number of major changes in their existing system.

The Data-Recorders feature a simplified error correction system.

Home's officials noted the ease with which key punch operators are retrained in Data-Recorder technique under Mohawk's training method.

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JOB SECURITY – YOURS!

By Everett D. Parker

Personal Page

Symposiums, seminars, meetings and conferences are a constant in the computer field. This summer alone there have been no less than twenty-one such gatherings throughout the world p from Athens (IEEE, International Symposium on Information Theory) to Washington, D.C. (this week's 20th ACM National Conference). For employers these conferences are becoming a source of annoyance as well as information. While each meeting attempts to present and clarify concepts within the industry, the focus of so many data processing professionals creates an opportunity for contacts by many eager but overwrought company recruiters as well as unscrupulous "headhunters". In some cases a man is afraid to ask his manager if he might visit the show for fear that his manager will think he is looking for another job or, even if he isn't, that someone may offer a better paying, more challenging position. ***Also, the rampant recruiting going on at these shows has a tendency to embarrass those who do attend them.*** You need not attend more than two sessions of any given conference to be approached by someone about a better paying job.

IN THE COMPANY

Productivity There is *no safe way to insure security* in this industry. All the traditional measurements and signs of security don't seem to apply in the world of computers. Just the ability to program well or analyze a system efficiently can insure your security. Whether you are with a manufacturer or a user, a skill properly learned and a job well done insures your security for an indefinite period. As you progress, your authority expands and your responsibility level rises. Most employment assignments in the computer field afford recognition of skill and performance. Who can argue with a well-prepared program that runs, and runs well? The most suitable job security in society is found in this kind of ability – competence and professionalism. When a program runs well, even a dull-witted supervisor must give acknowledgment. The merit of a task well done dictates promotion and greater opportunity. ***Job security in the computer business cannot be jeopardized if you know your business.***

Personal Contacts If you do not know what you are doing in EDP and aren't developing deeper and broader expertise, you must emphasize qualities other than computer skills to get ahead and to make your job secure. ***Emphasizing personal associations with the boss*** may not be the most wholesome behavior in the world - but it helps when promotional opportunities occur. You can feel quite secure wrapped in the blanket of personal-political associations.

Finger-Pointing If work output or quality of work are serious problems, you must *develop the skill of finger-pointing.* In short, if your work is sloppy and haphazard, blame others, "cover your tracks", and always look the other way. Deceit is a vice, but it is helpful to maintain a secure position in the face of incompetence.

Transferring Out Transferring to another division or department of a firm sometimes avoids an issue. ***Bad situations are best left behind,*** so why stand around after the accident has occured? Security can be maintained if you transfer out – soon enough.

The "In" Crowd When you learn to emphasize personal associations and have developed a keen sensitivity to the world of personal public relations, you may in fact be very secure in the recognition of your professional skills by your managers.

Needless to comment that such a person is fortunate that few top managers really know a great deal about today's data processing. Hopefully, they will never learn. If you were to emphasize the above, your job would be secure – there are many such people – and your promotion would be consummated by your associations – not your abilities.

IN TALENT

Talent, of course, must take priority in any conversation about job security within the computer community. Basic knowledge of hardware and software creates the solid foundation upon which a young man builds his reputation. When such a foundation has been laid a man goes about the arduous task of building his career. If he is fortunate, he may stay with the same firm. So few are those who have remained with their first employer that job security obviously does not reside in the Company but in the talent and the developed skill.

Move When Ready However, you should move only when you are ready. When is that? Ask someone! Consult other professionals in the field; if possible, talk the subject over with your manager; visit a reputable search or employment firm. One or all of these can advise you when and where to move. If you move only when you are ready to move, job security will never or seldom be a threat.

Skills If you can produce to your reasonable limit, time will never be an enemy. Job security in data processing is predicated upon skill. Skill is developed only with time and patience, whether the skill is in oil painting, dentistry or programming. If you produce to your reasonable limit, you can look to the future with eagerness and enthusiasm. To succeed, to insure job security, to develop, you need only learn and perform your job. It would help to round off your professional edges if you scanned a few trade journals, subscribed to Computerworld or joined one or two professional societies.

If you have several or many years of experience but only minimal knowledge, you are in trouble. Job security and position will always haunt you like a hidden specter. You will move, but for all the wrong reasons: fear, a misguided desire for prestige; an unhealthy eagerness for dollars. If you have not taken the time to learn your profession, ***the most you can hope to do is "get by."*** Your lack of foresight and casual approach to professionalism limit you beyond hope.

Job security in the computer industry resides in personal skill and ability. If you have learned the rudiments of programming and possess the impatient loyalty of a learner to his discipline, this entire article was a waste of your time. Comments, please, to:

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The Users Speak Up!

Jim Tupac, Share President, Addressing The Miami Meeting.

See Story Page 4.

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